AIR WE BREATHE, THE—A Study of Man and His Environment—Edited by Seymour M. Farber, M.D., Chief, University of California Tuberculosis and Chest Service, San Francisco General Hospital; Assistant Dean, Department of Continuing Education in Medicine and the Health Sciences, University of California School of Medicine and University Extension, San Francisco, California; and Roger H. L. Wilson, M.D., Assistant Clinical Professor of Medicine; Assistant Head, Medical Extension, University of California School of Medicine and University Extension, San Francisco, California. In collaboration with John R. Goldsmith, M.D., and Mello Pace, Ph.D., members of the Program Committee. Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Ill., 1961, 414 pages, \$14.00.

"The Air We Breathe" is the enticing title of a collection of papers presented at a symposium at the University of California Medical School Center in San Francisco. It should interest the practicing physician, those of many disciplines of science and most of all laymen concerned with the air we breathe. Because of the wide gamut of information and the variety of the subject matter presented, it is to be doubted if any one person is sufficiently knowledgeable in all facets of this subject to be a completely capable reviewer. The undersigned is not so endowed.

In addition to the aforementioned editors and collaborators, 27 internationally recognized contributors aid in this comprehensive multidisciplinary effort. The book is divided into the following four sections: (1) The normal atmosphere and its variations; (2) The air pollution problem of industry; (3) Urban living and air pollution, smog and fog; and (4) Specific problems, such as "The effect of dust on the human lung" and "environment and cancer."

The first six chapters of Section I are highly scientific, dealing with the dynamic nature of the atmosphere, with stress and human action, with factors of capsule climates, that is, underseas and space and man in his normal atmosphere. The final chapter of this section is a delightful, easily read discussion on "man made maladies." The author of this chapter introduces his subject with the statement—"although we are specially interested in maladies of medical interest, there are also maladies of economic interest and the two are interconnected."

Chapter 8 of Section II deals with factors concerned with the particle size of dust, its inhalation and retention within the lungs or its clearance.

Chapter 9—"The immediate and long-term effects of chemical irritants on man" holds special interest for this reviewer. Limitation of space forbids the length of discussion it deserves. The opening portion of this chapter complements the preceding chapter in regard to factors of inhalation. Nine tables are used as ancillary to the content of the test. All are excellent and illuminating. However, Tables 6 and 7 may be misleading unless attention is paid to the script. The tendency of a few investigators to relate a chemical exposure to pulmonary cancer demands the ultimate in clinical judgment and especially the application of "clinical epidemiology" so ably presented at the conclusion of this chapter.

The curious, inquiring and apprehensive mind of physicians and laymen alike will find some answers to the effects of airborne radiation. Even though presented with scientific terminology, it is not beyond the ken of the untutored in this field.

Section III presents the disaster potential of community air pollution, the automobile and smog, the failure in metropolitan planning and a panel discussion on what we can do to make our cities more habitable. This portion of the book provides valuable information for those areas of the United States only recently realizing that the smog problem is not confined to southern California.

The final chapters of this book are devoted to "specific problems" involving physiological and biological factors of air pollution and "lung cancer." The chapter on "smoking in relation to lung cancer" is provocative.

To assume that "The Air We Breathe" is just another run of the mill discussion on smog would be erroneous. This reviewer believes that there has been no other book written on this subject that is so complete as well as so basic in facts. Doctors Seymour M. Farber and Roger H. L. Wilson are to be congratulated on the arrangement of this symposium as well as the editing of this valuable volume.

R. T. Johnstone, M.D.

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HEART SOUNDS AND MURMURS—A Clinical and Phonocardiographic Study—P. A. Ongley, Consultant in Pediatrics, Mayo Clinic, Rochester, Minnesota; Howard B. Sprague, Board of Consultation, Massachusetts General Hospital; M. B. Rappaport, Former Head of Department of Electrophysiologic Research, Sanborn Company, Waltham, Massachusetts; and A. S. Nadas, Cardiologist, Children's Hospital, Boston, Massachusetts. Grune & Stratton, Inc., 381 Park Avenue South, New York 16, N. Y., 1960. 360 pages, \$9.75.

This monograph is a very good, up-to-date account of the important subject of heart sounds and murmurs written by experts in pediatric and adult cardiology, as well as by an electrophysicist. The book begins with an excellent history of the important contributions to clinical auscultation, a history of the stethoscope and a very good account of the human ear in auscultation and the physical principles which permit the reader to understand phonocardiography. The relationships among electrocardiography, apex cardiograms and the venous pulse in orientation of phonocardiograms are most helpful.

The authors then proceed with sections on the normal heart sounds, gallop rhythms, splitting of heart sounds, systolic and diastolic murmurs and individual valvular abnormalities. The volume closes with short chapters on various congenital cardiac defects, and the arrhythmias.

In general the text is well done and reflects modern concepts of the mechanisms and clinical value of auscultatory findings. The physiological correlations could be expanded, but probably were kept within bounds deliberately. The bibliography is particularly complete with respect to the early historical research; it is less complete with respect to later studies during the last two to seven years, especially with regard to the English papers, notably those of Wood, Leatham, Mounsey, Brigden, as well as the South African workers, Vogelpoel and Schrire. The bibliography on the congenital defects is quite scanty.

The major defects were few, one being the relatively poor illustrations of the cardiac murmurs. This defect is sometimes due to the original, but may be in the reproduction. The account of mitral and tricuspid insufficiency is relatively limited and the important work of Shillingford is not mentioned, particularly with respect to the confusion which may result between insufficiency of these two valves.

In general the defects are minor and the book can be highly recommended to the practicing physician as an authoritative, contemporary work on heart sounds and murmurs with one of the best accounts of the physical and acoustical principles involved.

MAURICE SOKOLOW, M.D.